

UNCLASSIFIED

**National Geospatial-Intelligence Agency (NGA)**  
**Working Animal Support Building (WASB)**  
**Submission to NCPC**  
**3 December 2015 Commission Meeting**

UNCLASSIFIED

NCPC NGA Working Animal Support Building at Fort Belvoir North Area, Springfield, Virginia

SUBMISSION TO THE NATIONAL CAPITAL PLANNING COMMISSION

Submission for December 3, 2015 Commission Meeting

Agency: Fort Belvoir Directorate of Public Works  
9430 Jackson Loop  
Fort Belvoir, Virginia 22060

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NCPC NGA Working Animal Support Building at Fort Belvoir North Area, Springfield, Virginia

**1. Project Report**

**1.1 Agency Point of Contact**

Mr. Bill Sanders  
Director, Public Works  
9430 Jackson Loop, Building 1442  
Fort Belvoir, Virginia  
703-806-3017

**1.2 Total Area of Site**

The Working Animal Support Building (WASB) site is approximately 0.21 acres. The WASB will be constructed at the location of the existing National Geospatial-Intelligence Agency (NGA) Remote Inspection Facility (RIF). The WASB has been configured at the existing RIF site to minimize the impact to existing plantings.

**1.3 Total Area of Building, Parking, and Roads**

The WASB is approximately 688 square feet or 0.016 acres. There project includes constructing approximately 92 square feet or 0.002 acres of new sidewalk. A portion of the interior of the RIF will be reconfigured.

**1.4 Projected Employment**

The WASB will not employ any new workers.

**1.5 Relationship to Master Plan**

The current Master Plan update shows the site for a Canine Care Facility (CCF) located near the RIF. The CCF will not be built. Instead, the smaller WASB will be constructed and some of the functions originally planned for the CCF will be performed in the reconfigured areas of the existing RIF.

**1.6 Coordination with Local Government and COG**

A Record of Environmental Consideration (REC) was prepared for the project. The REC documented that the project was determined to be categorically excluded under the provisions of CX (C)(1), AR 200-2, 32 CFR part 651, Appendix B, Section II. A General Conformity Record of Non-Applicability was developed for the project. No coordination was made with local governments and the Council of Governments.

**1.7 Schedule of Construction and Occupancy**

Construction of the WASB and site features will begin in late 2015 or early 2016 with completion by the spring of 2016.

## NCPC NGA Working Animal Support Building at Fort Belvoir North Area, Springfield, Virginia

**1.8 Project Cost and Funding**

Funding for the WASB is provided from NGA Operations and Maintenance funding and the estimated cost for the design and construction is \$720,000.00.

**2. Narrative****Background**

NGA has a K-9 explosive detection capability at its NGA Campus East (NCE) facility in Springfield, VA. NGA has one handler for each of its explosive detection dogs. Each handler takes his dog home at night. While at work, the dogs must be groomed and exercised daily, receive general and skill specific training, and be given food, water, and rest breaks. In addition, the dogs must receive veterinary care. The Working Animal Support Building (WASB) will be used for all of these requirements. The facility will also allow the handlers to maintain their qualifications in law enforcement/physical security by allowing the dogs to be left in the WASB while they attend meetings and conduct collateral security duties. The dogs will continue to be housed with their trainers at night.

**Project Site**

The site is located on Fort Belvoir North Area (FBNA), formerly known as the Engineering Proving Ground (EPG), within the campus of the National Geospatial-Intelligence Agency (NGA). The site is located to the south of the intersection of Barta Road and Heller Road, adjacent to the NGA Remote Inspection Facility (RIF).

**Stormwater Management**

The project will meet all state and federal stormwater management requirements. The final design uses a grass lines swale to meet all state stormwater quality and quantity requirements and EISA 438 option 1, the reduction of the 95<sup>th</sup> percentile storm event. The grass lines swale is designed to reduce quantity by allowing infiltration and improve quality by the filtering and settling out pollutants. Erosion and sediment control devices such as silt fence and inlet protection will be used during construction of the project. A total of 0.21 acres of disturbance will occur during construction and 0.017 acres of impervious cover will be constructed.

**Tree Removal and Restoration/Replacement**

No trees will be removed for this project. The WASB has been sited to avoid disturbing the existing shrubs in the planting bed behind the RIF.

**Parking**

No additional parking will be provided for the WASB.

NCPC NGA Working Animal Support Building at Fort Belvoir North Area, Springfield, Virginia

Utilities

All utilities for the WASB will be obtained from the existing RIF. No tree removal will be needed for utilities installation.

**3. Documentation**

- 3.1 NEPA was covered with a Record of Environmental Consideration (REC); attached.
- 3.2 Record of Non-Applicability (RONA); attached.
- 3.3 SHPO Documentation – Section 106 Consultation; attached
- 3.4 95% Construction Drawings; attached.

# Record of Environmental Consideration

PROJECT TITLE: NGA Canine Facility

PROJECT NUMBER/IJO Number: N/A

PROPONENT OF THE ACTION: U.S. Army Garrison Fort Belvoir, VA

**DESCRIPTION OF THE ACTION:** Construction of a kennel for the National Geospatial Intelligence Agency's canine inspection unit. The facility will be approximately 50'X24' building and contain: six 5'X10' kennels, with in/out doors for the dogs to access the canine containment system (6'X5'X10') placed on a concrete pad; at least one pet tub with ramp, to allow the handlers to wash the dogs; at least one set of industrial type washers and dryers to wash dog towels and any bedding materials (as needed); a veterinary type adjustable table for use in medical checkups; and a outdoor arena approximately 178' x 110'. The exterior of the building would complement the façade of the Remote Inspection Facility. Utilities would be tied into those of the RIF, all of which have sufficient capacity for the additional building demands.

ANTICIPATED DATE AND/OR DURATION OF THE PROPOSED ACTION: 2013

IT HAS BEEN DETERMINED THAT THE ACTION (CHOOSE ONE):

- ☐ 1. Is covered by an existing [ ] EA; [ ] EIS;
- ☒ 2. Is categorically excluded under the provisions of CX (C)(1), AR 200-2, 32 CFR part 651, Appendix B, Section II, "Construction of an addition to an existing structure or new construction on a previously undisturbed site if the area to be disturbed has no more than 5.0 cumulative acres of new surface disturbance. This does not include construction of facilities for the transportation, distribution, use, storage, treatment, and disposal of solid waste, medical waste, and hazardous waste."

- General Conformity under the Clean Air Act, Section 176 has been evaluated under the requirements of 40 CFR 93, Subpart B and the Record of Non-Applicability is required.
- Requirements of Section 106 of the National Historic Preservation Act must be met.
- UXO clearance has been completed at the site. However, on call construction support will be required for any clearing or construction activities.
- 50% of project's construction debris must be recycled per Army Policy.
- The proposed canine care facility total area of land disturbance is greater than 2500 sq ft. Therefore, the following stormwater regulations are applicable to the design and construction of the facility:  
Commonwealth of Virginia Storm Water Management Program Permit Regulations 4VAC50-60  
The design must include an Erosion and Sediment Control Plan which complies with Virginia Erosion & Sediment Control Handbook (VESCH). If this project disturbs 5,000 square feet or more, Section 438 of the Energy Independence and Security Act of 2007 will apply.
- Trees removed due to construction will be replaced in accordance with the Fort Belvoir Tree Policy.
- Tree removal should not occur until after July 30 to comply with Migratory Bird Treaty Act.
- Ensure final site location is out of the Small Whorled Pogonia buffer, detailed in the BRAC EIS.
- CZMA is covered under the 2007 BRAC EIS/ROD

(and no extraordinary circumstances exist as defined in 32 CFR part 651.29(b).)

SIGNATURE OF PREPARER: Marc Russell

PHONE NUMBER: 703-806-0022

DATE:

1 Aug 12

# Record of Environmental Consideration

For Environmental Office Use Only

THE ENVIRONMENTAL OFFICER ☐ CONCURS ☐ DOES NOT CONCUR WITH THE ABOVE DETERMINATION.  
EXPLANATION (CONTINUE ON BACK IF NECESSARY):

NAME OF ENVIRONMENTAL OFFICER (PRINT/TYPE): Patrick McLaughlin

SIGNATURE:

*For David L. Hale 2 Nov 2012*

PHONE NUMBER: 703-806-3193

DATE:

## GENERAL CONFORMITY – RECORD OF NON-APPLICABILITY

**Project/Action  
Name:**

**Fort Belvoir – NGA Canine Facility**

**Project/Action  
Point of Contact:**

**Jerry Sheehan, Air Program Manager  
(703) 806-4008  
Marc Russel  
(703) 806-0022**

**Begin Date (Anticipated): August 2012**

**End Date (Anticipated): 3 months after  
start date**

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this project/action because the highest annual emissions (construction phase) from this project/action have been estimated to be:

### **Construction Phase**

Volatile Organic Compounds (VOC)	0.098 tons per year (tpy)
Nitrogen Oxides (NO <sub>x</sub> )	0.70 tpy
Sulfur Oxides (SO <sub>x</sub> )	0.063 tpy
Carbon Monoxide (CO)	0.26 tpy
Particulate Matter Less than 2.5 µm (PM <sub>2.5</sub> )	0.078 tpy

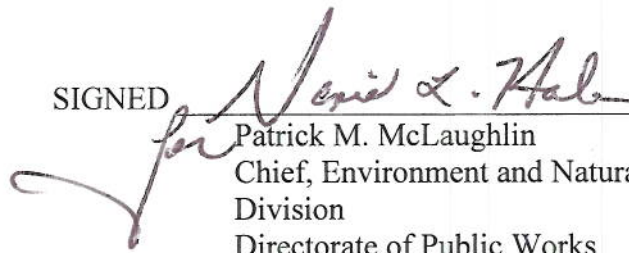
These emission rates, including any combination of PM<sub>2.5</sub> and its potential precursors (i.e., NO<sub>x</sub>, SO<sub>x</sub>, and VOC), are below the conformity threshold values established at 40 CFR 93.153(b):

### **Conformity Threshold Rate**

VOC	50 tpy
NO <sub>x</sub>	100 tpy
SO <sub>x</sub>	100 tpy
CO	100 tpy
PM <sub>2.5</sub>	100 tpy

Supporting documentation and emissions estimates are attached.

SIGNED



Patrick M. McLaughlin  
Chief, Environment and Natural Resources  
Division  
Directorate of Public Works



## **SUPPORTING DOCUMENTATION**

### **Description of Project/Action:**

NGA plans to construct a canine exercise and training facility west of the Remote Inspection Facility (RIF) at Fort Belvoir. The project involves constructing a new one-story 1,200 square foot concrete building, which will contain six kennels to house the dogs. A fenced-in yard will be installed adjacent to the building to serve as an exercise and training area. There will be no asphalt paving, but a driveway and sidewalks are planned for access to the new building from the RIF.

### **Analysis Methodology:**

Analysis was performed using an Excel spreadsheet developed using the methodology and information provided in the *Nonroad Engine and Vehicle Emission Study--Report, US EPA Doc 21A-2001, 1991* for construction operations. The spreadsheet quantifies Construction phase emissions from site preparation and land disturbance, heavy equipment, painting, and vehicles used to transport workers and construction materials to the site. The emissions were then compared to the applicable regulatory thresholds.

### **Input Parameters and Assumptions:**

Below are the project-specific parameters entered for the proposed project, which includes the following related activities:

#### Heavy Construction Equipment

- This includes emissions from heavy construction equipment involved in any necessary site preparation and land disturbance activities.

#### Fugitive Dust from Site Preparation Activities

- Fugitive dust emissions were calculated using the greatest number of eight-hour days that equipment was estimated to operate. Site preparation and land disturbance activities were estimated to occur for 60 days, the entire estimated project duration. The building and yard will have a footprint of 20,780 square feet but an area of 25,000 square feet was assumed to allow for the movement of vehicles/equipment/material, construction activities, fence installation, and tree planting.

#### Paints and Coatings

- It was assumed that all interior and exterior walls will be primed with one coat and painted with two coats; the ceiling was assumed to require one coating of paint.
- The interior area to be painted was determined based on the number of kennels provided and proportionate sizes.
- It was assumed that one gallon of paint will be used for every 350 square feet of surface painted, while one gallon of primer will be used for every 150 square feet of surface.
- Paint and primers will be brushed or rolled, resulting in no PM emissions due to an assumed 100% transfer efficiency. Paint will contain 150 g/L VOC and the primer will contain 200 g/L VOC, the maximum permitted by *Commonwealth of Virginia State Air*

*Pollution Control Board Regulations for the Control and Abatement of Air Pollution, 9 VAC 5 Chapter 40, Stationary Sources.*

Fuel Burning Equipment

- The building will be heated and cooled with utilities originating in the RIF; therefore, the canine facility will operate no fuel burning equipment.

The following assumptions were made for this project:

- Project duration is estimated to be 3 months (60 days).
- Construction phase emissions include site preparation, construction, painting, debris hauling, and contractor/equipment/material transportation. No operational phase emissions will result from this project.
- PM<sub>2.5</sub> is some fraction of PM<sub>10</sub> and to be conservative, it was assumed that PM<sub>10</sub> is equal to PM<sub>2.5</sub> where a PM<sub>2.5</sub> emission factor was not available. Therefore, if the predicted PM<sub>10</sub> emissions do not exceed regulatory thresholds, then neither will PM<sub>2.5</sub>. Fugitive dust emissions are presented as PM<sub>10</sub> in the emission calculations.

**Results**

Estimated Calculations

The below emission estimates are from the Excel spreadsheet developed using the methodology and information provided in the *Nonroad Engine and Vehicle Emission Study--Report, US EPA Doc 21A-2001, 1991*:

<b>Emissions Summary, (tons/year)</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>
Construction phase	0.098	0.70	0.26	0.063	0.078
<b>TOTAL</b>	<b>0.098</b>	<b>0.70</b>	<b>0.26</b>	<b>0.063</b>	<b>0.078</b>





**DEPARTMENT OF THE ARMY**  
U.S. ARMY INSTALLATION MANAGEMENT COMMAND  
US ARMY GARRISON, FORT BELVOIR  
DIRECTORATE OF PUBLIC WORKS  
9430 JACKSON LOOP, SUITE 100  
FORT BELVOIR, VIRGINIA 22060-5116

REPLY TO  
ATTENTION OF

10 JUL 2012

Directorate of Public Works

SUBJECT: Section 106 Consultation, Construction of Canine Care Facility and Recreational Facilities at National Geospatial-Intelligence Agency (NGA) Campus, Fort Belvoir, Virginia

Mr. Marc Holma  
Architectural Historian  
Department of Historic Resources  
2801 Kensington Avenue  
Richmond, Virginia 23221

Dear Mr. Holma:

Fort Belvoir proposes to construct a Canine Care Facility and a Recreational Facilities Complex for the NGA Campus located at Fort Belvoir North Area (formerly Engineer Proving Ground). The Canine Care Facility will provide specialized training space and services for service dogs used by NGA. The Recreational Facilities Complex will provide tennis, basketball, and volleyball courts, and horseshoe pits for NGA staff.

The undertaking will involve construction of an estimated 1,500 square foot, one story building, concrete access drives, and supporting utilities for the Canine Care Facility with a total limit of disturbance estimated at 0.5 acres. The Recreational Facilities Complex will involve the construction of courts, fencing, sidewalks and supporting utilities with the total limit of disturbance being less than 3 acres.

The Area of Potential Effect (APE) for this undertaking is defined as the limits of construction disturbance (maps enclosed). Fort Belvoir has undertaken historic property identification efforts within and adjacent to the APE and no historic properties have been identified. FBNA was evaluated in 2007 as part of the *An Architectural Survey of the Engineer Proving Ground Fort Belvoir, Virginia* and it was determined that the existing structures were ineligible for listing (VDHR# 2007-0250). Additionally, no archeological resources are present within the APE. On 15 July 1994 the SHPO concurred with Fort Belvoir's determination that there were no National Register eligible archeological resources located at FBNA (VDHR File No. 90-0901-F).

Fort Belvoir has determined that no historic properties will be affected by the construction of the Canine Care Facility and the Recreational Facilities Complex as

**"LEADERS IN EXCELLENCE"**

outlined above. Please provide comment on our determination of no historic properties affected in accordance with 36CFR800.4(d). If we do not receive your comments within the required 30 days, we will assume concurrence and proceed with the project as planned.

Point of contact is Ms. Kelly Lease, Acting Environmental Compliance Branch Chief, at 703-806-0020.

Sincerely,

  
Bill Sanders  
Director

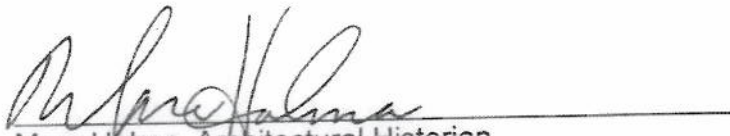
Enclosures

US Army Garrison Fort Belvoir

Section 106 Consultation; Construction of Canine Care Facility and Recreational Facilities at National Geospatial-Intelligence Agency (NGA) Campus, Fort Belvoir, Virginia

VDHR File #: 2012-1080

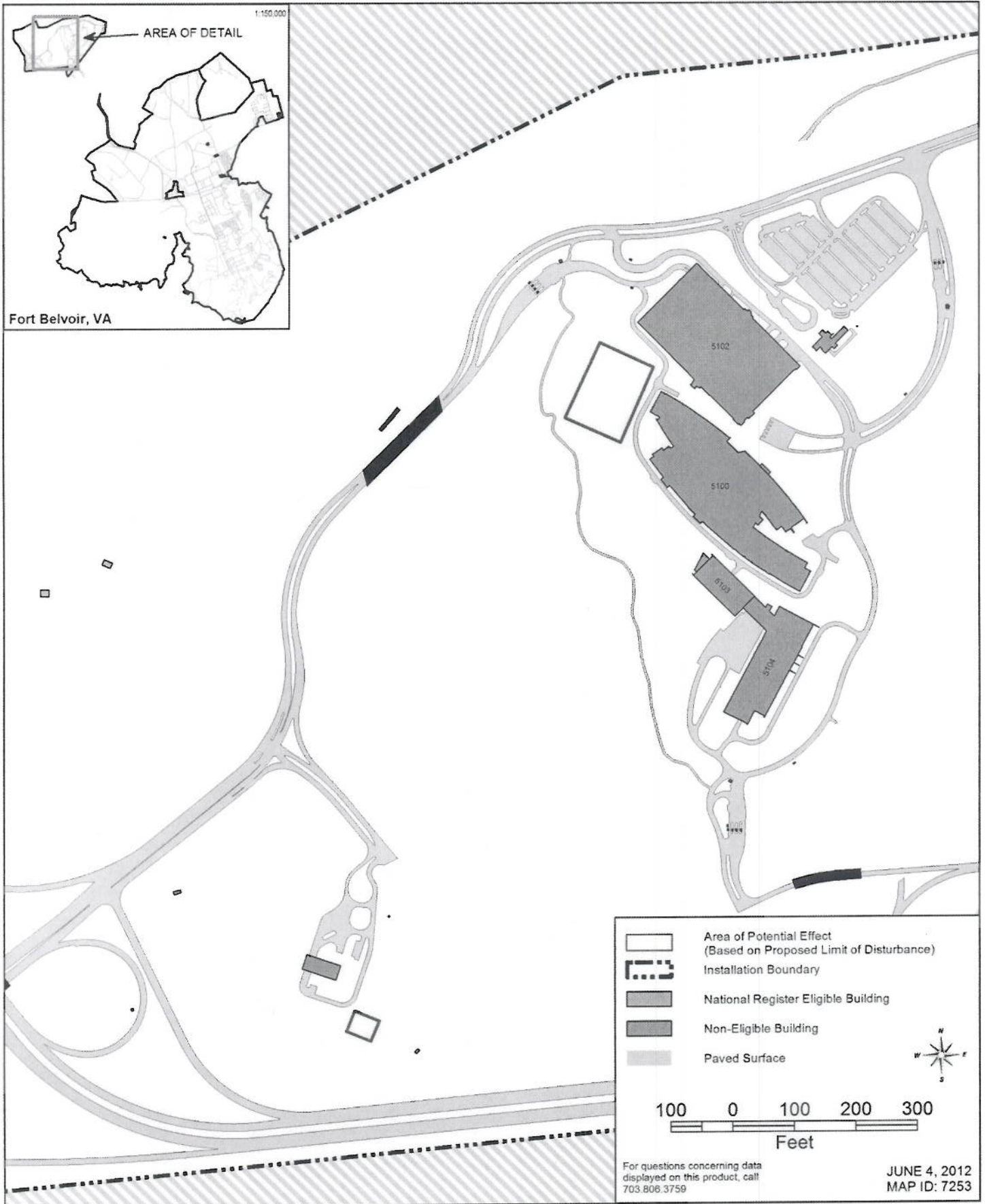
VDHR has reviewed the above referenced project and concurs with the Army's determination of No Historic Properties Affected



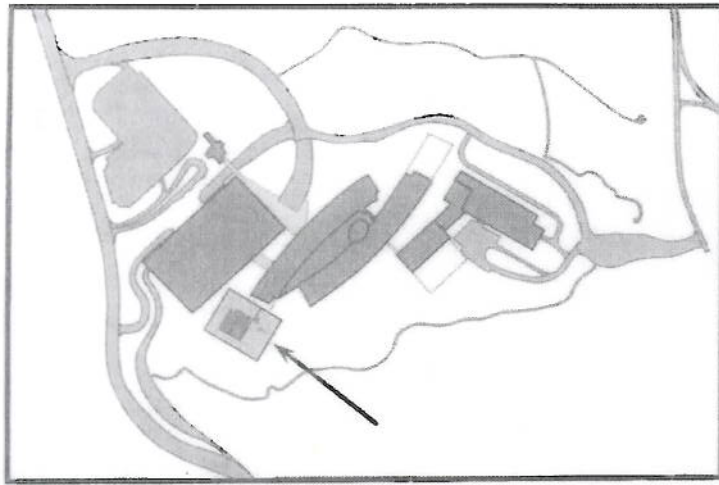
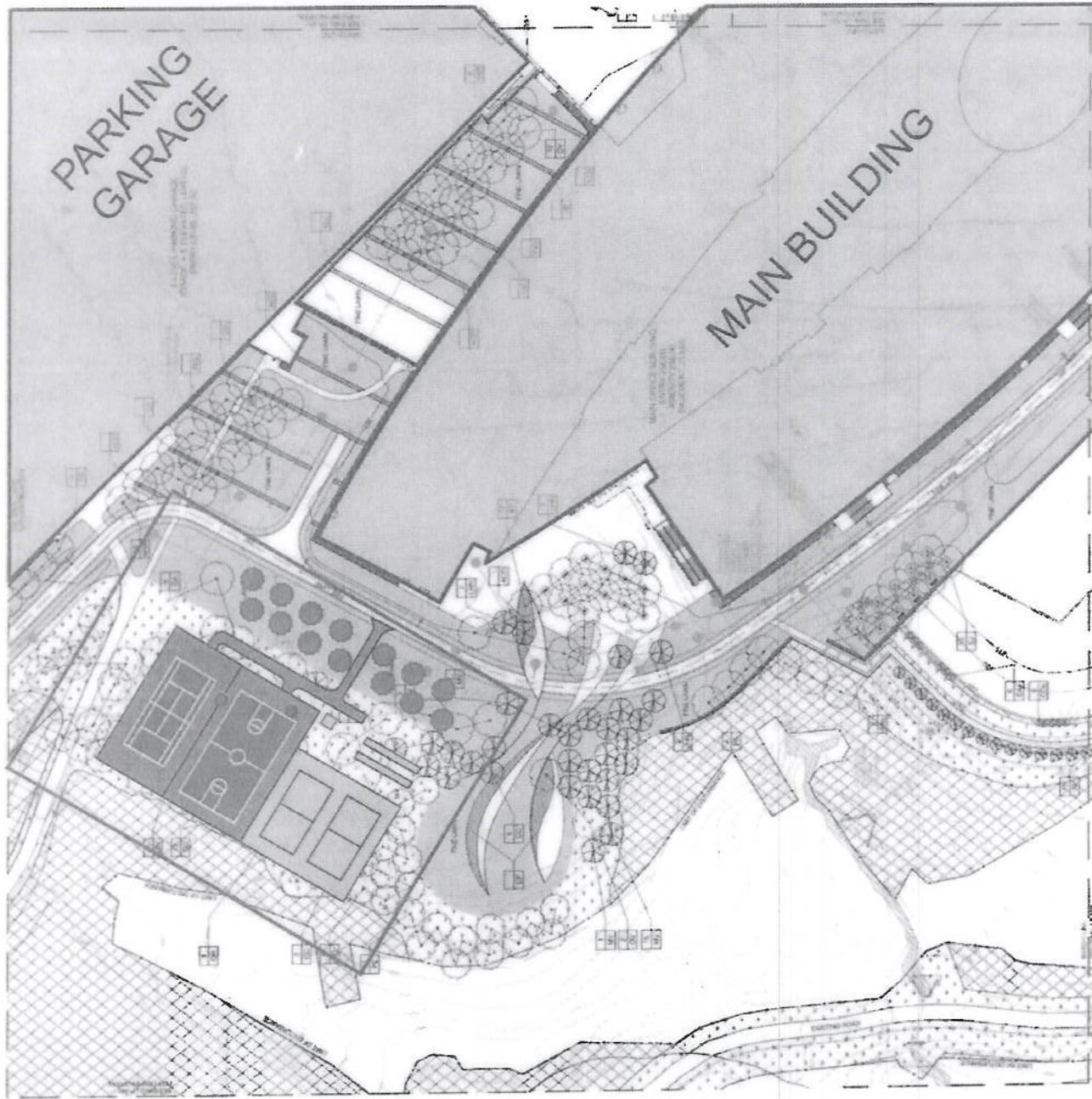
Marc Holma, Architectural Historian  
Office of Review and Compliance  
Virginia Department of Historic Resources

13 July 12  
Date






# Area of Potential Effect for Canine Facility and Recreational Facilities at NGA





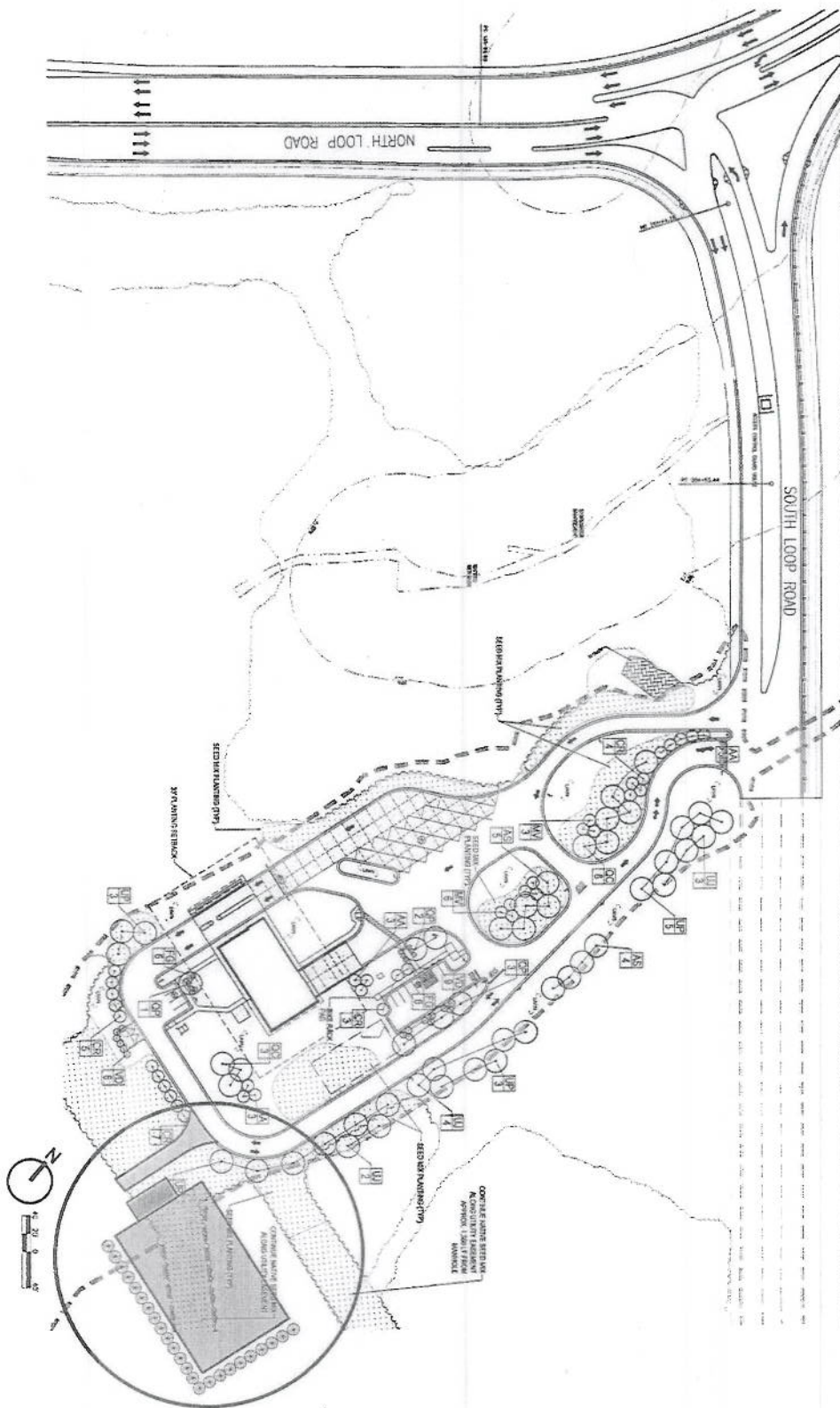


# **LEGEND**

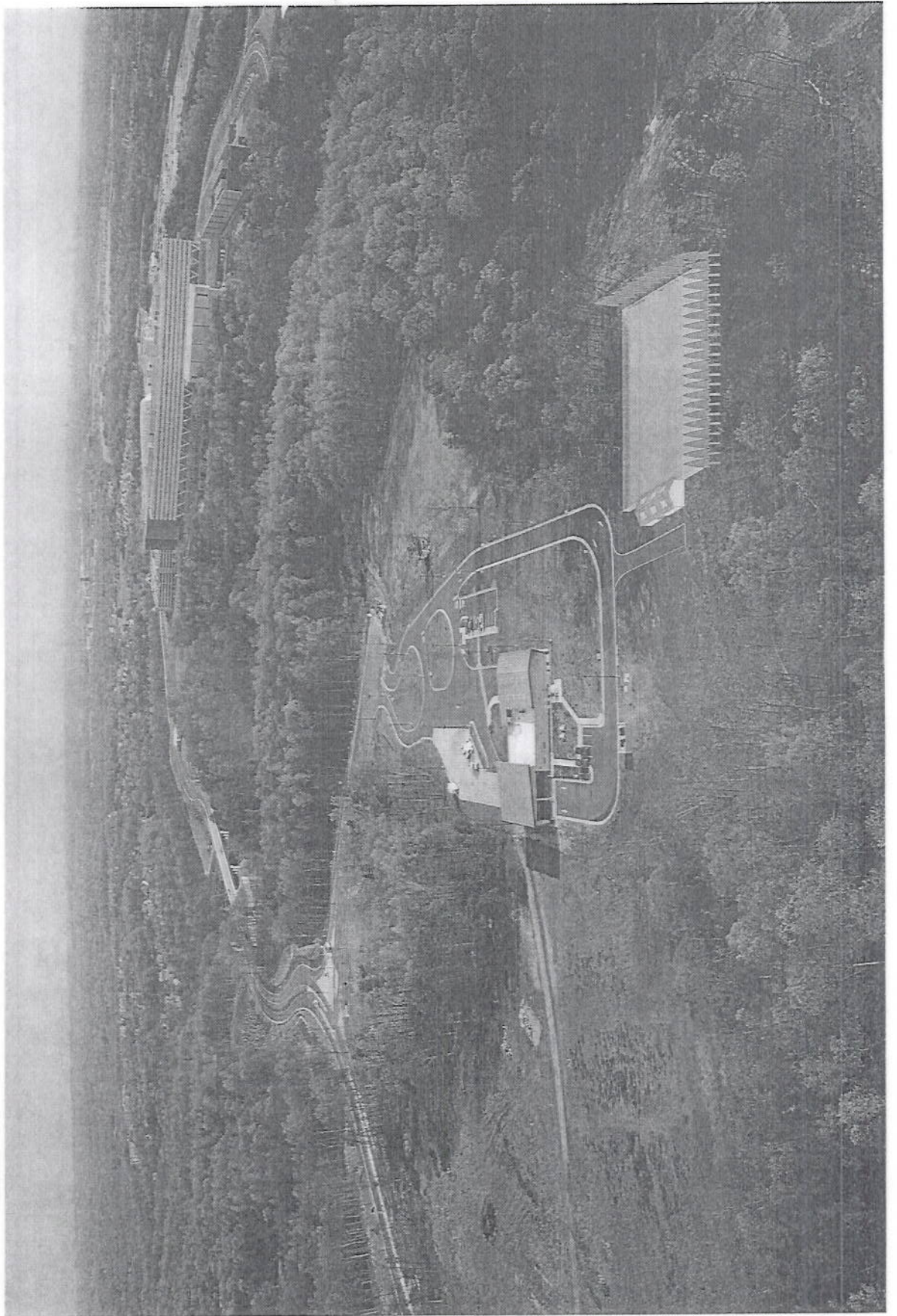
-  Basketball Court
-  Tennis Court
-  Volleyball Court
-  Horseshoe Pit
-  Hose Bib & Fountain



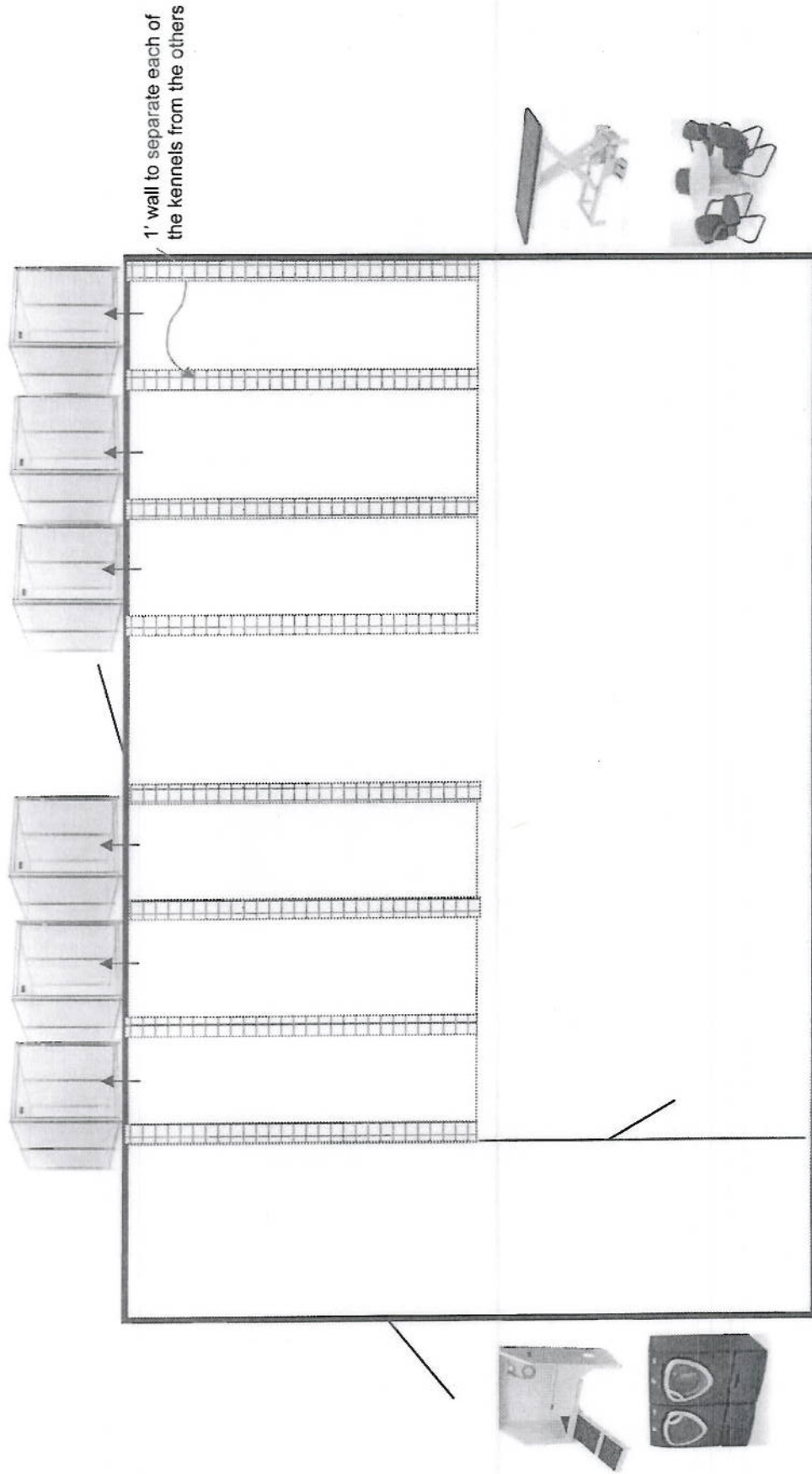
## **RECREATIONAL FACILITIES FOR NGA CAMPUS EAST**







## BUILDING INTERIOR (Notional)



Inside the approximately 50'X24' building would be: six 5'X10' kennels, with in/out doors for the dogs to access the canine containment system (6'X5'X10') placed on a concrete pad; at least one pet tub with ramp, to allow the handlers to wash the dogs; at least one set of industrial type washers and dryers to wash **dog** towels and any bedding materials (as needed); a veterinary type adjustable table for use in maintaining shots/health check ups; a table and chairs for use by the officers when completing paperwork; miscellaneous shelving/cabinets; and, storage area related to the canine handlers. The floor would be need to concrete or some type of material to allow regular cleaning of the kennels. The exterior of the building would complement the façade of the Remote Inspection Facility. Utilities would be tied into those of the RIF, all of which have sufficient capacity for the additional building demands.